Input: Weighted adjacency matrix $W \in \mathbb{R}^{N \times N}$, number of clusters k

Compute degree matrix D

$L \leftarrow D - W$

Compute first k eigenvectors $v_1, ..., v_k$ of L and stack them into $X \in \mathbb{R}^{N \times k}$

$y_i \leftarrow$ normalized ith row of X (note: $y_i \in \mathbb{R}^k$)

Cluster $(y_i)_{i=1,...,n}$ into clusters $C_1, ..., C_k$ using k-means

Output: Clusters $A_1, ..., A_k$ where $A_i = \{j | y_j \in C_i\}$